

**In the claims:**

Please amend the claims as follows:

1-20 (cancelled)

1 21. (currently amended) A method of determining a parameter of interest of an earth  
2 formation having a plurality of layers, the method comprising:  
3 conveying a multi-component resistivity logging tool into a borehole in a selected  
4 layer in said formation; and  
5 using at least one transmitter receiver combinations ~~to provide and providing a~~  
6 measurement having selective sensitivity to the ~~desired reservoir formation~~  
7 ~~properties~~ parameter of interest.

8

1 22. (currently amended) The method of claim 21, ~~further comprising wherein the~~  
2 measurement is used for at least one of: making multi-component measurements  
3 ~~for at least one of (i) geo-steering, and (ii) drilling assistance and well placement~~  
4 decisions.

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1 23. (original) The method of claim 21, further comprising:  
2 measurement of a multi-component array combined with measurement of at least  
3 one of a gyro, accelerometer, magnetometer and inclinometer.

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1 24. (currently amended) The method of claim 21, further comprising:

performing dual compensated measurement of a multi-component array to  
improve at least least one of signal to noise ratio and measurement stability and  
signal content with reservoir, geological and geophysical information.

25. (currently amended) The method of claim 21, further comprising providing a  
measurement at a plurality of measuring multiple frequency frequencies, and  
using the measurement at the plurality of frequencies for determining the  
parameter of interest. in at least one of sequentially and simultaneously; and  
analyzing multiple frequency survey data for focusing interpretative data in  
target formation parameters.

26. (original) The method of claim 21 further comprising:  
performing multi-component transmitter receiver array measurements at different  
orthogonal and non-orthogonal orientations comprising at least one of xy, xz, yz,  
20°-40°, and 40°-90°.

27. (original) The method of claim 21 further comprising:  
performing multi-component measurements combining measurement comprising  
at least one of symmetric/symmetric, asymmetric/symmetric, and  
asymmetric/asymmetric.

28. (original) The method of claim 21, further comprising:  
using measurements for geosteering.

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1 29. (currently amended) The method of claim 21, wherein providing the  
2 measurement further comprises: further comprising:  
3 measuring a time domain response; and  
4 converting the time domain response into a frequency domain response. and  
5 ~~selecting a frequency spectrum of interest for analysis.~~

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1 30. (cancelled)

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1 31. (cancelled)

1 32. (cancelled)

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1 33. (canceled)

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1 34. (canceled)

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1 35. (canceled)

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1 36. (original) The method of claim 21 or 23, further comprising:

2 binning measurement data.

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1 37. (original) The method of claim 36 further comprising:

2 averaging depth intervals and azimuthal sectors for the binned measurement data.

3

1 38. (original) The method of claim 36 or 37 further comprising:  
2 processing the binned measurement data; and  
3 estimating or inverting formation drilling target parameters from the processed  
4 binned measurement data from a given transmitter receiver array.

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1 39. (original) The method of claim 38, further comprising:  
2 making a well placement plan along with a known reservoir drilling target model;  
3 defining expect measurement response for a transmitter receiver array.

4

1 40. (original) The method of claim 39, further comprising:  
2 making a drilling decision to continue or modify drilling plans based on  
3 differences between inverted formation drilling target parameters obtained from  
4 processed measured binned data and the expected measurements response based  
5 on an initial drilling plan and reservoir parameter model.

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1 41. (original) The method of claim 21, wherein  
2 a transmitter source is periodic with respect to both time domain and frequency  
3 domain.

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1 42. (currently amended) The method of ~~claim 21~~ claim 37, wherein  
2 ~~the~~ raw data assigned to a depth interval and azimuth sector ~~falls~~ fall in different  
3 points of the a repeat cycle thus bin, the method further comprising,

4 averaging a time series having unequal time intervals between sampled points.

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1 43. (original) The method of claim 21, where the tool rotation is not synchronized  
2 with a transmitter repeat cycle.

3

1 44. (currently amended) The method of claim 21, wherein ~~the tool rotation of the~~  
2 logging tool is synchronized with the a transmitter repeat cycle.

3

1 45. (currently amended) The method of claim 21, further comprising:  
2 holding the tool stationary while ~~the~~ raw data times are collected.

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